

comparing a video format of said video content with a video transmission format and converting said video content to said video transmission format if said video format and said video transmission format differ;

comparing a metadata format of said metadata content with a metadata transmission format and converting said metadata content to said metadata transmission format if said metadata format and said metadata transmission format differ;

creating a menu describing said audio content, said video content, and said metadata content;

combining said audio content, said video content, and said metadata content into a broadcast stream for transmission to a plurality of receivers that are capable of checking said various stream types to determine which streams of said various stream types may be used by said receivers;

transmitting said menu to said plurality of receivers that are capable of checking said stream type to determine which streams may be used by said receivers; and,

transmitting said broadcast stream.

2. The method of claim 1 wherein said step of creating a framework definition further comprises:

creating a framework definition record for each element of said audio content, said video content, and said metadata content wherein at least one framework definition record includes price information.

3. The method of claim 1 wherein said step of creating a menu further comprises:

representing each element of said audio content, said video content, and said metadata content with an icon; and

assigning a logo to said menu..

4. The method of claim 1 wherein said step of converting metadata content further comprises:
- determining if said metadata content is an image file.
5. The method of claim 4 wherein said step of converting said metadata content further comprises:
- loading said image file;
 - loading a file conversion definition;
 - converting said file using said conversion definition; and
 - outputting a converted image file.
6. A method for rendering portions of a broadcast stream that contains audio content, video content, and metadata content and a menu indicating the contents of said audio content, video content, and metadata content comprising:
- transferring preloaded metadata associated with said broadcast stream to a receiver that is capable of checking stream type to determine which streams may be used by said receiver prior to transmission of said broadcast stream;
 - storing said preloaded metadata;
 - receiving said broadcast stream;
 - displaying said menu wherein said menu includes an icon representing said preloaded metadata;
 - receiving a user input; and
 - rendering said preloaded metadata during airing of said broadcast stream in response to said user input.
7. A system for combining multiple media and metadata streams having content into a framework for distribution of said content to a viewer, comprising:
- at least one video source having an output;
 - at least one audio source having an output;
 - at least one metadata source having an output;

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a framework controller that receives said video source, audio source, and metadata source and produces an omnimedia package integrating said outputs of said video source, said audio source, and said metadata source into a framework;

a framework definition module that interfaces with said framework controller and defines all content to be used in said omnimedia package, said content comprising various stream types for transmission to a plurality of receivers that are capable of checking said various stream types to determine which streams of said various stream types may be used by said receivers; and

a delivery module that receives said omnimedia package from said framework controller and transmits said omnimedia package to a receiver.

Add new claims 8-15 as follows:

8. The system of claim 7 further comprising:

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a receiver that receives said omnimedia package and that is capable of checking said various stream types to determine which streams of said various stream types may be used by said receiver and that renders selected streams of said various streams, said receiver further coupled to at least one user input device that provides interactivity between said viewer and said receiver.

9. The method of claim 1 further comprising:

synchronizing at least one metadata stream type with an event.

10. A method of rendering a broadcast omnimedia package that contains various stream types of audio, video, and metadata content comprising:

receiving a broadcast comprising said omnimedia package;
determining said stream types contained in said omnimedia package;
comparing said stream types contained in said omnimedia package with receiving unit capabilities; and
rendering at least one stream type that corresponds to said receiving unit capabilities.

11. The method of claim 10 further comprising:

receiving a user input selecting said at least one stream type.

12. A receiving unit that processes omnimedia information that contains various stream types comprising:

a receiver controller;

first cache that stores a portion of said omnimedia information;

a decoder unit that detects audio, video, and metadata stream types contained in said omnimedia information;

a media controller having a tuner and a decoder that produces a video output from said omnimedia information;

second cache that stores information relating to capabilities of said receiving unit; and

software that compares said capabilities of said receiving with said stream types of said omnimedia information and that controls operation of said decoder such that only portions of said omnimedia information that correspond to said receiving unit capabilities are rendered.

13. The receiving unit of claim 12 further comprising:

menu software that produces a menu from information contained in said omnimedia information; and

control software that receives an input from a user input device and controls selection and rendering of said omnimedia information.

14. A receiving unit that processes omnimedia information that contains various stream types comprising:

receiver controller means for executing software and for controlling operation of the receiver;

cache means for storing a portion of said omnimedia information;

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decoder means for detecting audio, video, and metadata stream types contained in said omnimedia information;

media controller means for producing a video output from said omnimedia information;

cache means for storing receiving unit capabilities; and

software means for comparing said receiving unit capabilities with the stream types of said omnimedia information and for controlling operation of said media

controller means such that only portions of said omnimedia information that correspond to said receiving unit capabilities are rendered.

15. The receiving unit of claim 14 further comprising:

menu software means for producing a menu from information contained in said omnimedia information; and

controller software means for receiving an input from a user input device and controlling selection and rendering of said omnimedia information.

Remarks

Claims 1-7 have been amended. New claims 8-15 have been added. The claims as amended and added further clarify the novelty of embodiments of the present invention.

This application is considered to be in condition for allowance and such action is earnestly solicited.

Dated this 3rd day of February 2003.

Respectfully submitted,

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